

Global thinking,
interdisciplinary research:
the spirit of Leibniz!



Nestled in a modern city surrounded by nature and with an exceptional standard of living, Leibniz University Hannover offers excellent working conditions in a vibrant scientific community.

The advertised position offers the opportunity to gain initial insights into scientific work as well as a comprehensive look at various aspects of manufacturing technology. The IFW offers a modern research infrastructure, future-orientated topics and a large industrial network!

The Institute of Production Engineering and Machine Tools (IFW) welcomes applications for the following position starting at the earliest possible date:

Student Assistant in the field of "Modelling & simulation meet machining & AI" (23 hours per month)

The position is for a duration of 1 year.

Your role

Do you love code, data and innovative technologies? Then work with us on a real high-tech topic with industry relevance. In the project, you will combine AI and machining. You will investigate the complex interactions between additive manufacturing (3D printing) and final machining (milling) of lightweight structures for aviation. These delicate, often highly flexible components are highly optimised for minimal use of materials – which makes processing them a real challenge. At our company, you will work at the interface between machining technology, simulation and artificial intelligence.

The area of responsibility includes support with:

- Modelling and programming: developing machine learning and classic models to predict milling forces
- Optimisation and testing: improving the accuracy of models through intelligent tuning
- Analysis and validation: data analysis and structured preparation for training processes, validation of models through real milling tests on additively manufactured components
- Tool development: integrating models into existing simulation environments

Who are we looking for?

We are looking for a motivated student assistant to join our team with immediate effect.

Your qualification:

- You have a good command of German
- You work independently and in a structured manner
- Knowledge of Python or C# is required
- An interest in data analysis, modelling and machine learning techniques is desirable
- Previous experience of working with GitLab is an advantage

The successful candidate must be enrolled at a German higher education institution in a degree programme relevant to the position.

Equal opportunities and diversity are core values at Leibniz University Hannover. Our goal is to tap into individual potential and open up possibilities. We therefore welcome applications from anyone interested in the position, irrespective of gender, nationality, ethnic origin, religion or ideology, disability, age, sexual orientation and identity. Preference will be given to equally-qualified candidates with disabilities.

Why join us?

With more than 5.000 employees, Leibniz University Hannover is one of the largest and most attractive employers in the Hannover region. We offer a vibrant interdisciplinary and international working environment, and promote personal and professional [development](#) ranging from subject-related skills to languages.

To promote health and well-being among employees, we offer an extensive [sports programme](#) with over 100 different sports, as well as a fitness centre with a sauna and climbing space. [Health management](#) measures, such as courses on stress management, good nutrition and relaxation, aim to ensure a healthy workplace.

Additional information

For further information, please contact Fabian Schlenker (phone: 0511 762-18162, email: schlenker@ifw.uni-hannover.de).

Please submit your application and supporting documents by 27.04.2025 electronically to

Email: schlenker@ifw.uni-hannover.de

or alternatively by post to:

Gottfried Wilhelm Leibniz Universität Hannover
Institute of Production Engineering and Machine Tools
Fabian Schlenker
An der Universität 2, 30823 Garbsen

<http://www.uni-hannover.de/en/jobs>

Information on the collection of personal data according to article 13 GDPR can be found at <https://www.uni-hannover.de/en/datenschutzhinweis-bewerbungen/>